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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,702	07/02/2003	Girish P. Chandranmenon	Chandranmenon 2-2-9-12-2	5036
8933	7590	05/07/2007	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			DOAN, KIET M	
			ART UNIT	PAPER NUMBER
			2617	
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			05/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/613,702

Applicant(s)

CHANDRANMENON ET AL.

Examiner

Kiet Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-20, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 5-12, 14-20, 22, 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is response to Remarks file on 02/09/2007.

Applicant's elected Group I, claims 1-4, 12, 5-11, 14-20, 22 and 23

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 12, 5-9, 14-20, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rusch (US 6,801,777).

Claims 1, 14, 18, 22, 23. Rusch teaches a method of operating a mobile node having a network layer and a plurality of network interface, each with a respective device driver, the method comprising the steps of:

transmitting communications from the network layer to any of the network interfaces by way of a multi-interface driver capable of communication with the respective device driver corresponding to each respective network interface (Column 2, C3, L30-35, C9, L25-29, Fig.1, Illustrate as mobile node wherein contain plurality of network interfaces and radio controller 110 processing common application layer protocol).

switching from a first one of the network interfaces to a second one of the network interface by changing the one of the plurality of device drivers with which the multi-interface driver communicates, while hiding the switching from the network layer

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(C6, L12-23, teach radio controller 110 switching network interface, Fig.2, No. 224 and described).

It would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Rusch system, such that mobile node having plurality of network interface, each with a respective device driver that transmitting network layer to any of the network interfaces by way of a multi-interface driver and switching from a first one of the network interfaces to a second one of the network interface by changing the one of the plurality of device drivers to provide means for avoiding disconnected in communication when moving from one network to another network that the users capable select between the available connections.

Consider **claims 2, 15**. Rusch teaches the method of claim 1, further comprising communicating between a virtual interface and the network layer by way of the multi-interface driver, the virtual interface presenting the appearance of always being an active interface to the network layer, regardless of which network interface is being used at a given time (C3, L43-60).

Consider **claims 3, 16**. Rusch teaches the method of claim 2, wherein the virtual interface provides a source address to the network layer to be used in data packets transmitted by the mobile node (C3, L41-67, C4, L1-5 teach the communication device 110 contain radio interface that provide common application layer protocol which obvious provides a source address to the network layer to be used in data packets

transmitted by the mobile node).

Consider **claims 4, 17, 19**. Rusch teaches the method of claim 1, further comprising: selecting the second one of the network interfaces, based on a signal strength of each network interface and a user priority assigned to each network interface (C4, L35-55).

Consider **claim 5**. Rusch teaches a method of operating a mobile node, comprising the steps of:

identifying at least two available interfaces for communications by the mobile node

determining a plurality of characteristics of each of the network interfaces;

selecting one of the network interfaces based on the plurality of characteristics;

and

communicating by way of the selected network interface (C6, L30-65, Fig.2, Illustrate No.202/212 teach characterize and select available network).

Consider **claim 6**. Rusch teaches a method according to claim 5, wherein the mobile node is communicating by way of a current network interface connection other than the selected network interface, the method further comprising:

establishing a connection between the mobile node and the selected network interface; and

maintaining the current network interface connection until after the connection between the mobile node and the selected network interface is established (C2, L20-41).

Consider **claim 7**. Rusch teaches the method of claim 5, wherein the selecting is based on a respective score for each available network interface, the score being based on a signal strength value and a user priority value (C4, L35-54).

Consider **claim 8**. Rusch teaches the method of claim 7, wherein: the mobile node is currently communicating by way of a current network interface connection, and the score is calculated by applying a higher weight coefficient to the signal strength of the current network interface connection than a weight coefficient applied to the signal strength of any other available network interface (C4, L35-54 teach the communication device 100 can calculate the signal transmitted from one or more communications network to determine location which inherently applying weight coefficient to the signal strength of any other available network interface).

Consider **claim 9**. Rusch teaches the method of claim 7, wherein a weight coefficient applied to the user priority value for each network interface depends on the signal strength for each network interface (C4, L25-54).

Consider **claim 12**. Rusch teaches the method of claim 1, further comprising: automatically selecting the second network interface based on predefined criteria; displaying an identification of the automatically selected interface; receiving a manual override instruction from a user identifying a selection of the second network by the user; and switching to the network selected by the user (C2, L26-40, Fig.1 and Fig.2 Illustrate and described limitation).

Consider **claim 20**. Rusch teaches the mobile node of claim 18, wherein the selecting means includes hysteresis (C2, L40-65, for skill in the art, the communication device can 100 have plurality of interface to select between network which contain hysteresis).

2. **Claims 10, 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rusch (US 6,801,777) in view of Ayyagari et al. (US 2002/0176366)

Consider **claim 10**. Rusch teaches the limitation of claim as discuss **but silent** on the method of claim 9, wherein a weight coefficient of zero is applied to the user priority value for each network interface having a signal strength below a respective threshold value for that network interface.

In an analogous art, Ayyagari teaches "System and method for achieving zero-configuration wireless computing and computing device incorporating same". Further, **Ayyagari teaches** the method of claim 9, wherein a weight coefficient of zero is applied to the user priority value for each network interface having a signal strength below a

respective threshold value for that network interface (Abstract, Paragraph [0014], [0061-0062]).

Therefore, It would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Rusch and Ayyagari system, such that weight coefficient of zero is applied to the user priority value for each network interface having a signal strength below a respective threshold value for that network interface to provide means for priority for the users able to access network with low signal strength.

Consider **claim 11**. Ayyagari teaches the method of claim 10, wherein: the mobile node is currently communicating by way of a current network interface connection, and the threshold value for the current network interface connection is lower than the threshold value for other network interfaces (Paragraph [0061]).

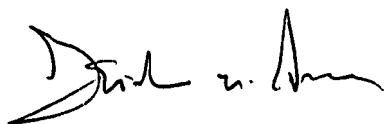
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan
Patent Examiner


ERIKA A. GARY
PRIMARY EXAMINER